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TESTS OF TWO VENETIAN BLINDS

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TESTS OF TWO VENETIAN BLINDS

I. INTRODUCTION

In accordance with a request dated July 6, 1953, tests were made of two complete Venetian blinds for conformance with Section 4.3 of Federal Specification RR-B-446 dated 30 June 1950, and the requirements of Paragraph 1-04 of the Contract Specifications.

II. TEST RESULTS

CONFORMITY WITH FEDERAL SPECIFICATION

The test results showed that the specimens complied with the requirements of Paragraphs 4.3.1, 4.3.2, 4.3.3 and 4.3.5 of the Federal Specification. Under Paragraph 4.3.4, the breaking strength of the tapes was found to be a little below the minimum Specification requirement of 250 pounds and under Paragraph 4.3.7, the color fastness of the tapes when exposed to light was found to be "fair" instead of "good" as required by the Specification. It should be noted, however, that the color fastness is determined by visual estimate and not by any absolute standard of comparison. The results observed during tests of breaking strength, shrinkage and color fastness of the tapes, cross straps and cords are summarized in Table 1.

TABLE 1

TESTS OF TAPES, CROSS STRAPS, AND CORDS
FOR STRENGTH, SHRINKAGE, AND COLOR FASTNESS

Tests		Results	Requirements
Width, in.			
side straps (tapes)		1 1/2	1 1/2 ± 1/16
cross straps		7/16	3/8 min.
Breaking strength, lb			
side straps (tapes)	(4.3.4)	218 *(1) 234 *(1)	250 min.
cross straps	(4.3.5)	25	20 min.
cord	(4.3.3)	223	125 min.
Shrinkage, %		6.7	7 max.
Color fastness	(4.3.7)		
light		fair *(2)	good
water		good (2)	good

*Fails to meet the requirement.
(1)Average of 5 samples.
(2)Visual estimate.
The samples meet the other requirements.

TESTS OF TWO PRESSURE SLIDES

I. INTRODUCTION

In accordance with a request dated July 6, 1950, tests were made of two complete Tracklan slides for conformance with Section 4.3 of Federal Specification [illegible] dated 30 June 1950, and the requirements of Paragraph 1-[illegible] of the Federal Specifications.

II. TEST RESULTS

CONFORMITY WITH FEDERAL SPECIFICATION

The test results showed that the specimens complied with the requirements of Paragraph 4.3.1, 4.3.2, 4.3.3 and 4.3.4 of the Federal Specification. Under Paragraph 4.3.4, the retaining strength of the tapes was found to be a little below the minimum specification requirement of 250 pounds and under Paragraph 4.3.7, the color features of the tapes were reported to light was found to be "fair" instead of "good" as required by the Specification. It should be noted, however, that the color features is determined by visual estimate and not by any accurate standard of comparison. The results observed during tests of bending strength, shrinkage and color features of the tapes, these stress and cords are summarized in Table 1.

TABLE 1

TESTS OF TAPES, STRESS STRAIN, AND CORDS FOR STRENGTH, SHRINKAGE, AND COLOR FASTNESS

Tests		Results	Requirements
Width, in.			
side strength (tapes)		1 1/2	1 1/2 - 1/16
cross strength		7/16	3/8 min.
Breaking strength, lb			
side strength (tapes)	(4.3.4)	250 *(1) 250 *(2)	250 min.
cross strength	(4.3.2)	80	80 min.
cord	(4.3.3)	125	125 min.
Shrinkage, %		5.7	7 max.
Color fastness	(4.3.7)		
light		fair *(2)	good
water		good (2)	good

*Fails to meet the requirement.
(1) Strength of 3 samples.
(2) Visual estimate.
The samples meet the other requirements.

A salt-spray test was performed on parts of the Venetian blinds, in accordance with the requirements of Paragraph 4.3.8 of the Federal Specification. The results and conclusions obtained from the salt-spray test are summarized below.

1. Ten component parts of a Venetian blind were submitted for 100 hour salt-spray test in accordance with Federal Specification QQ-M-151, Metals; General Specification for Inspection of.

2. At the conclusion of 100 hours in the salt-spray cabinet the parts were washed free of salt and loosely adhering corrosion products and inspected, the results of the inspection being as follows:

Slats: All slats were in good condition, there being only slight evidence of rust on the ends and in the region of the cut edges in the cord slots. Very slight evidence of rust on edges of slats. Slight blistering along edges and ends and around cord slots on slats. Remainder of surface of slats free from blistering.

Top Section: Zinc plated mechanism approximately 75% rusted but still capable of being operated. Top section in generally good condition except for slight evidence of rust on cut edges. Some slight blistering of paint in corrugations, at cut edges and at areas of cut-outs. Blistering slightly more prominent than that occurring on slats. End cap in poor condition due to blistering and peeling of paint. Unpainted interior surfaces of end cap slightly rusted.

Bottom Section: This section was in generally good condition, there being only slight evidence of rusting at the cut-outs and along the lock seam in the interior of the section. Some faint blistering in areas of forming and slight deterioration of paint along lock seam on exterior of section.

3. It is difficult to predict how the subject Venetian blind will perform in actual service. Inasmuch as it withstood the severe conditions of the 100-hour salt-spray test reasonably well, it might be expected to perform satisfactorily in normal atmospheres for reasonably long periods of time. In coastal atmospheres, where conditions might be likened to those in the salt spray at a decelerated rate, somewhat shorter life is to be expected.

4. The only other tests of a similar nature conducted by this Bureau were on slats from a Venetian blind, all edges of which had been coated with a bituminous enamel to preclude their rusting. After 100 hours in the salt spray these slats showed no evidence of paint failure.

No tests were made under Paragraph 4.3.5 of the Federal Specification since metal cables were not used in the specimens submitted.

CONFORMITY WITH CONTRACT SPECIFICATIONS

The specimen Venetian blinds were found to comply with all parts of Section 1-04 of the Contract Specifications, with the following exceptions:

Par. 1-04(b): The end pieces on the tilt rails were constructed of plastic instead of metal.

Par. 1-04(3): The bottom rails were 1 15/16 inches wide instead of 2 inches. The openings for the lifting cords were stamped out instead of being drilled.